Design & our Future Library: spaces, technologies & services





@malbooth

This is a presentation that I gave to the NZ Tertiary Education Libraries Special Interest Group (TELSIG) or LIANZA in November 2013. It looks a little like earlier presentations that I've given on the same subject, but this version includes some new influences from 2013 as they have influenced our concepts. The basic elements remain, but a visit to the Hunt Library (NCSU) and some things that I heard at Educause 2013 have really helped us to focus on the technologies in side our future library and why they are so critical for us to embrace.



UTS: Library Vision

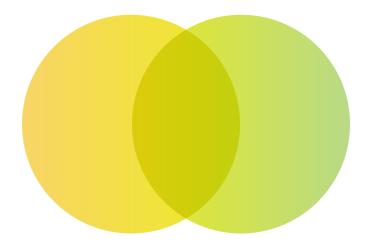
Connecting people, knowledge & culture at the heart of the campus

The vision hasn't really changed, although I am now also saying that we should become the intellectual, cultural and social heart of the new UTS campus. (Borrowing from Hunt Library!)



UTS Library: Towards 2017 & Beyond

UTS: Library 2017+



Culture

Providing Inspiration

Adding Context to the Knowledge

Recognising UTS Achievements



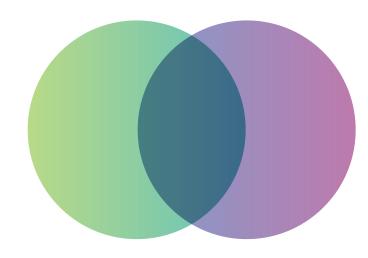
Book Spotter's Guide to Avian Titled Literature
UTS Library

Culture is both critical and pivotal to our future. It helps to distinguish us from online services and from a world in which libraries have become storage buildings for books. As well as providing inspiration, meaning and context for knowledge, it helps us connect people to knowledge and to connect people within our community. It is an intangible asset, but something our patrons do expect from us.



UTS Library: Towards 2017 & Beyond

UTS: Library 2017+

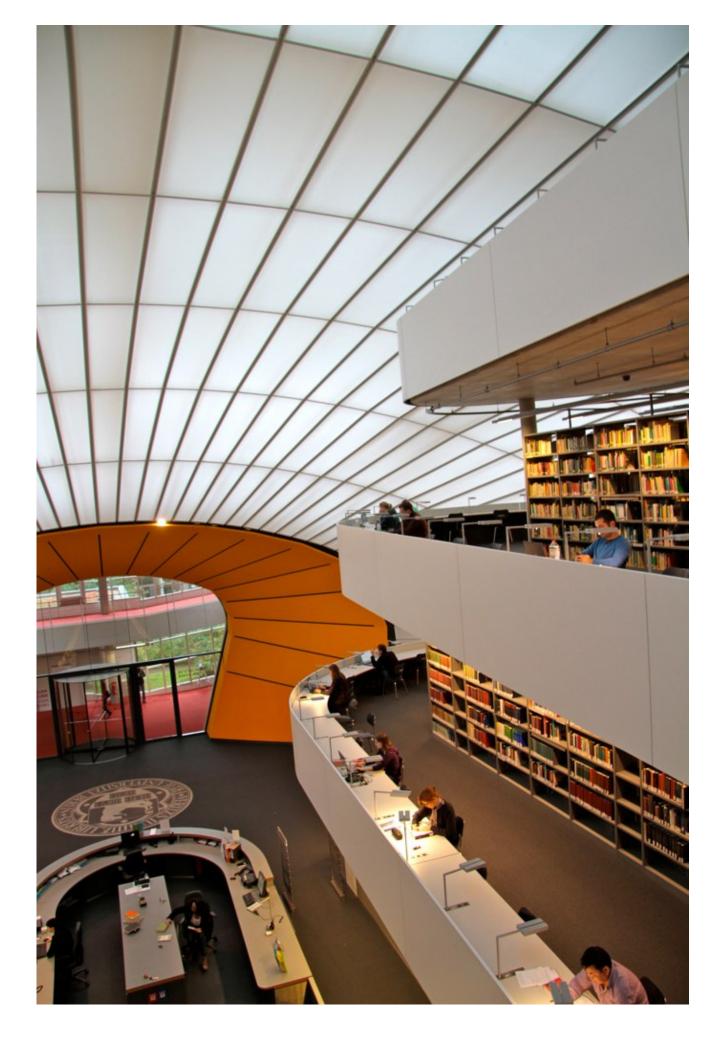


Knowledge

Exciting Curiosity, Discovery

New Services for future Education, Data

New Technologies



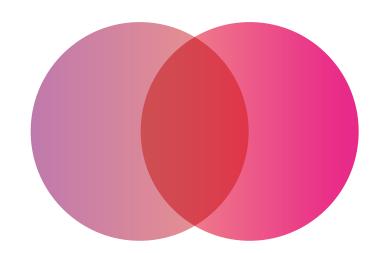
Philological Library, Free University, Berlin

Our efforts with discovery must drive curiosity about our collections and our services. The new technologies we are employing like RFID and ASRS will lead to the design and development of a new service model for our library. That is already starting with research in 2012 into how our users behave and what they need from us.



UTS Library: Towards 2017 & Beyond

UTS: Library 2017+



Collaboration

Spaces for Interaction

Connections

Inter-disciplinarity

Neutral Space



Cafe, Humboldt University Library, Berlin

Collaboration can be enhanced by spatial and furniture design, but we must also be more active in connecting our users to encourage collaboration and in going beyond just providing access to a neutral space that isn't owned by a particular faculty or school within the University. Interactivity between faculties must be encouraged by the provision of spaces and services in the Library that facilitate those connections.



Our Design Challenges

- 1. Designing new Library Spaces that incorporate appropriate technologies
- 2. Designing a new Service Model
- 3. Designing a new Organisation to move into the new space & deliver the new service model.

That support future directions in learning, research and the creative intelligent use of data at UTS.

These three challenges are deeply linked and cannot be dealt with in isolation of each other. All must be considered and progressed in concert with each other. And they obviously must be cognisant of UTS future directions and priorities.



Collaborative Creativity

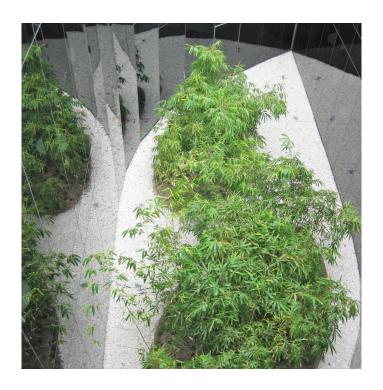


We have a strong record of working with current and future stakeholders to try and gain a sense of what they wanted or imagined for our future and their future library. Here is pictured a workshop of junior high school students who will become our future undergrads. They gave very insightful descriptions of what they thought was important for our future library.

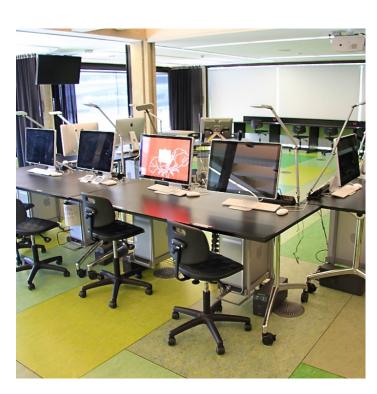








Greenery & Water



Media Spaces



Obvious Sustainability



Art & Randomness



Intuitive Tech



Meaningful signage



Thematic Identity

These points are what the year 7 & 9 students told us they wanted in a university library of the future after a half day informal workshop in our current library in September of 2010. Some of the things they told us: Extended learning - the opportunity to learn beyond the set curriculum (i.e. art & culture should be prominent in a library).

What can we do to provide randomness in our libraries? Everything we do is about (mostly outdated ontologies and structures!).

Gaming & media spaces are probably essential now. A library without them in the future will be irrelevant.

Orientation spaces have a significant effect, more significant than any signage, on the behaviour of those entering. It is expected by our clients.

Water features, greenery and natural light are probably things we would wish to see ourselves.

Future students will expect all technology that we provide to be intuitive. If it isn't it won't be used.

Signage can be over-done, and to be effective it must be meaningful.

Our future students expect like-books to have some kind of thematic identity that gives users/readers a clue about their content.

I didn't really understand why students said they liked the curved spaces in the UTS Library until I saw those of the Philological Library in Berlin's Free University.

Library spaces and services must learn to be customisable and personalised. Maybe we are too precious about those spaces and don't understand their true potential.

We want our future library to be a social hub, but it also must provide exposure to culture, so the use of art within the library will be critical.

Our sustainability initiatives must be visible and demonstrate our progress (or not) in all dimensions/facets.

Comfy chairs are essential because patrons simply will not spend every hour in a library awake.

"Lack of rules" perhaps indicates that we still have too many rules, or too many signs indicating the rules. Perhaps there are other ways to influence and encourage behaviour besides rules?



Future Library Spaces - from current students & staff



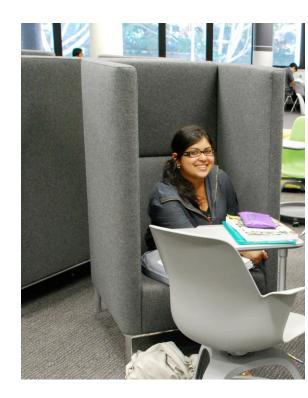




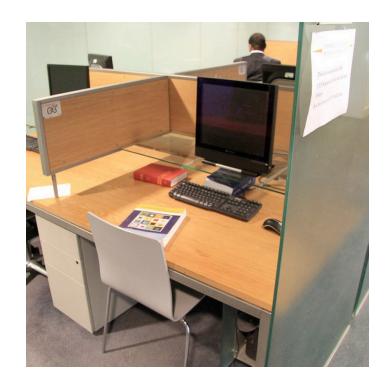
Quiet spaces



Group study



Individual study







Special Collections



Exhibition / display



IL teaching

These points come from what we have heard from current students through interaction with them or from surveys and other forms of feedback as well as what we know to be required in terms of the services we continue to provide.

All are reinforced by the behaviour of our students and the questions they constantly ask in the library, particularly with regard to quiet spaces, places for individual study and places for group study.

We'd also like to hear from our students, about what else they want, need, expect or look for in their library!

The issue for us now is to decide on the floor space that is to be allocated to these kinds of space requirements and initiatives as well as space for about 250,000 items on shelves.



How should we recognise & reflect key UTS strategic priorities and new directions?

Eg: changes in T&L, data, creative intelligence, engagement, taking risks

The spaces we design must clearly reflect and account for UTS strategic priorities and directions. We must support whatever changes are coming in teaching and learning, be able to support the intelligent use of data at UTS, be able to engage across faculties and connect people across the whole campus as well as the local creative industry precinct and be prepared to take some risks in the services and spaces we provide.

My belief is that we must recognise the importance of culture, understanding the reality of ambiguities, often trust our intuition and remember the purpose of meaning in what we do. Those elements are all too often forgotten, dismissed or discounted by bean-counters, but I believe they are critical in innovation.



SHOULD BE | flexible | scalable | sustainable | robust | designed | naturally lit | atmospheric | attractive | awesome | accessible | not generic |

These are the most desirable characteristics of the future library as we see them now.

I think flexibility and scalability are easy enough to understand. Preferences and needs change over time.

Sustainability is an expectation (from students, the University & community) and we believe it is a morel obligation. It will soon become more of a compliance requirement than it is now.

University libraries must be robust. It means that fittings need to be designed for a lot of users who may not be too concerned for them. That means quality furnishings that can be cleaned or refurbished when damaged. Cheap furnishings simply do not work in busy libraries.

By "designed" we mean designed for the desired behaviours in academic libraries (collaboration, reading, writing, editing, cogitation, inspiration, etc.) - with those behaviours we do not want (vandalism, theft, harassment, etc.) designed out through carefully considered spatial, colour, interior and lighting design. We've done some early work on particular issues we have with our Designing Out Crime research unit. Natural lighting is something that is requested all the time by all groups we consult. It cannot be ignored. Naturally lit spaces are also the most popular in our current library. A successful library is a popular library. It must attract users.

I think the library must also be awesome, imaginative and inspiring. UTS is aligning itself with "creative intelligence", so the library must also offer more than the ordinary or plain in this respect. A lot of that relates to technology that all can access and use within the library: to visualise and animate data and other research outputs; to create video and sound works; to create other physical work using 3D printers and laser cutting equipment; and to learn through gaming if that takes off.

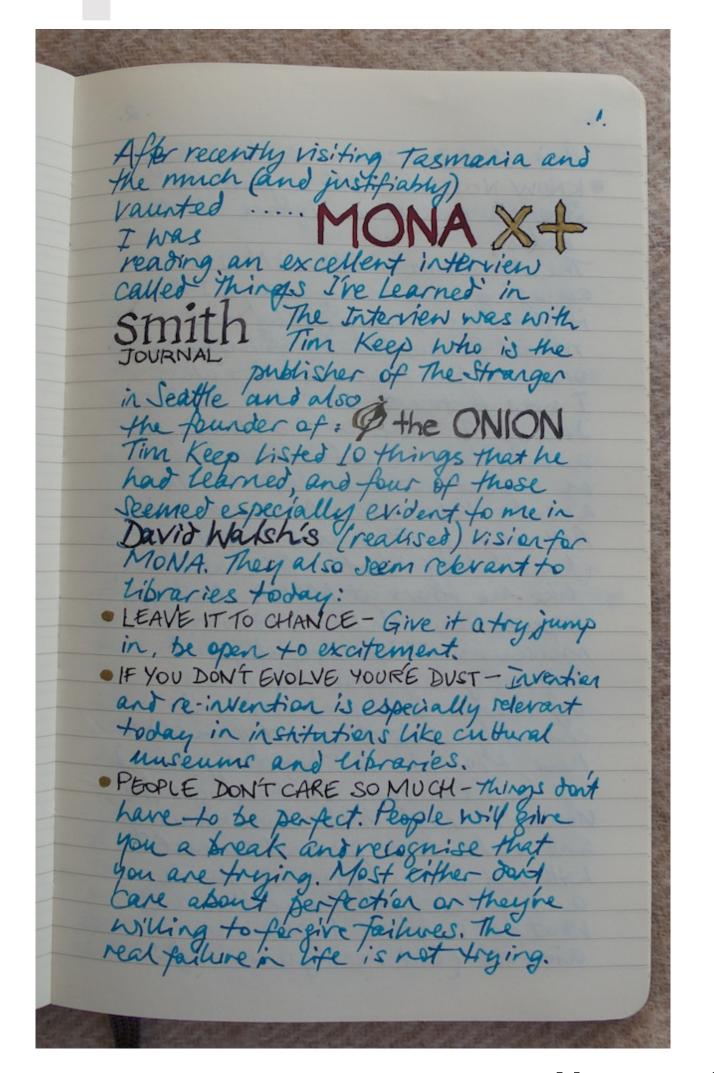
Accessibility for all is another moral obligation and compliance issue. We would like to use our Disability Action Group to assist us in designing our spaces and services.

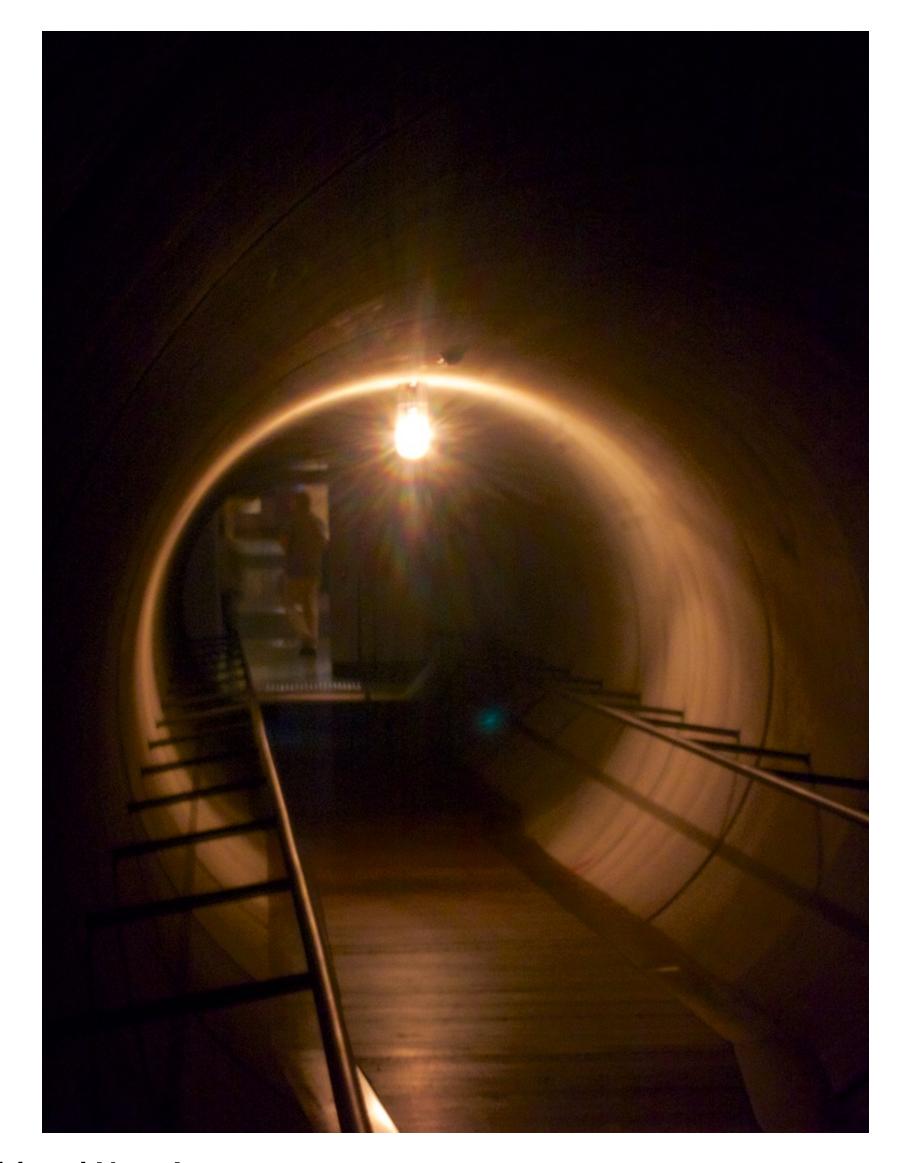


2013: Further stimulus; iterative development

What I've said in the previous slides was where we were at in early 2013. Since then a number of people, visits and events have influenced our views about the future library, so the concept we had has begun to evolve.

Future Library - the magic of not knowing

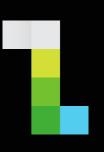


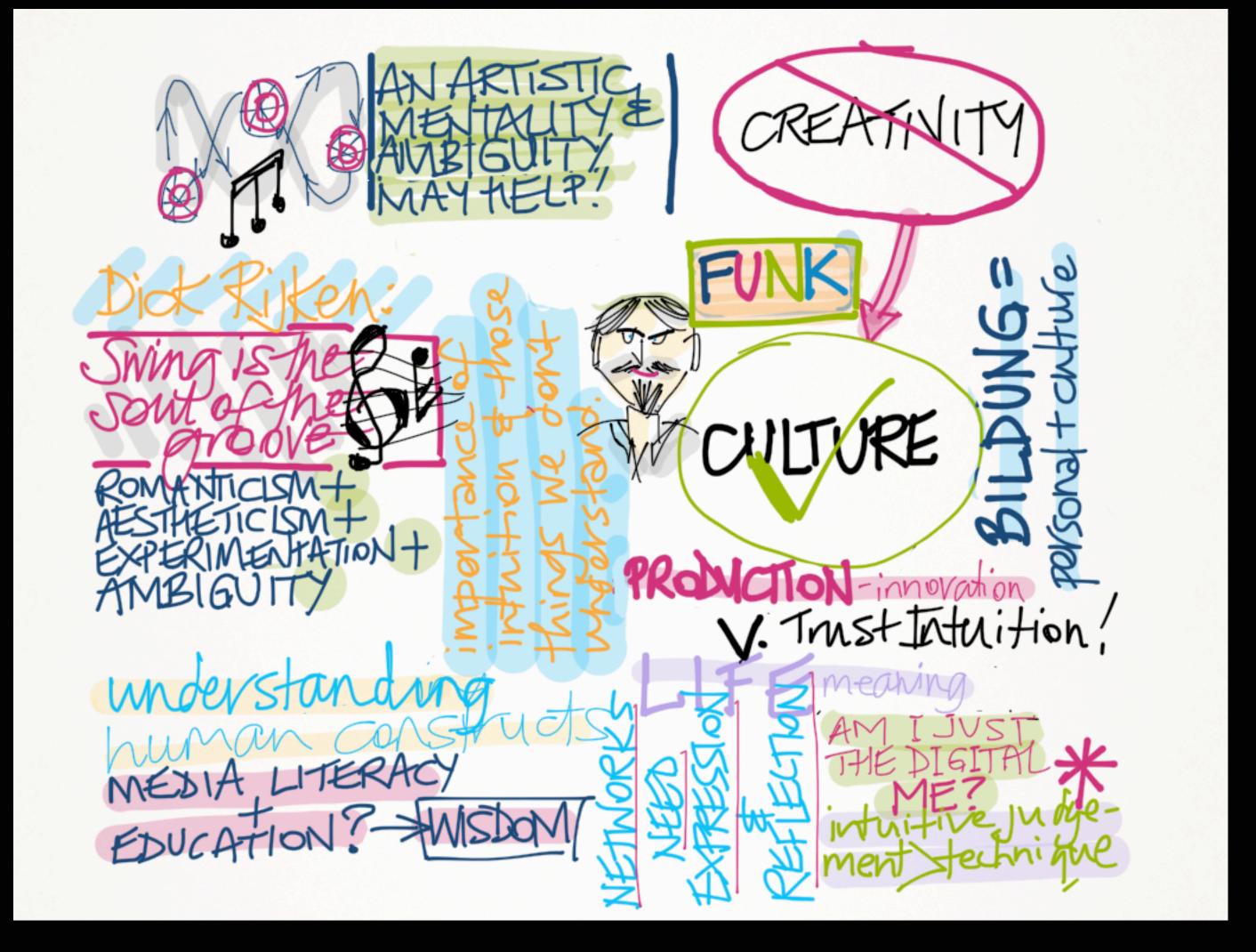


Museum of Old and New Art

See: http://malbooth.com/2013/04/18/some-thoughts-about-mona-part-1/

My visit to MONA really had a profound impact on my beliefs about how cultural institutions are influenced by their design. Here they also started by not knowing (about the rules), nor caring about them too much. It has had a huge impact (beneficial) on the visitor experience and the discovery of art.





Dick Rijken

See: http://malbooth.com/2013/02/14/sketch-notes-swing-is-the-soul-of-the-groove/

In the post linked above you can read how Dick Rijken stressing the importance of culture over creativity and the essential nature of aspects (such as ambiguity, romanticism, aestheticism and experimentation) that are often forgotten, ignored or dismissed. He also reminded us of the importance of intuition in an age where we are obsessed with measurements, proof by data, benchmarking and endless dull surveys.



Ken Robinson

Imagination -> Creativity -> Innovation

Technology isn't over; more profound future changes

Libraries not just about access to information; need to embrace technologies that give us new purpose

Life & education are not so linear; need to be more organic; different questions; no correct answers

I was lucky enough to attend Educause 2013 in Anaheim, California in October. I had one arm in a sling after a fall that dislocated my left shoulder, but I took handwritten notes in a notebook and on looking back, some of the sessions I attended had some interesting and stimulating content, so I might do a few posts about the best sessions. This first post is about the keynote that opened the conference by Ken Robinson, the English author, speaker and adviser on education.

He started quoting lots of famous people like Asquith, Churchill and even Dorothy Parker. All very amusing and entertaining. My favourite (as a lapsed economist) was the J.K. Galbraith quote: The only function of economic forecasting is to make astrology look respectable. Then

he focussed on the way we are as a species and the all pervasive effects of cultural norms on our behaviour. He said that some technologies, like TV for example can change that.

I liked his reminder that when Apple first introduced the iPhone in 2007(?) it had something like 800 apps. Now it has over 800,000 and that is well beyond what Apple would have designed themselves or even imagined/anticipated. It is a great example of people appropriating a

brilliant idea and then seeing what they can do with it.

He then moved on to talk about imagination, creativity and innovation. He described Imagination as giving us the power of Creativity, which is a process in which you do something or make something. Innovation is putting good ideas into practice. I think there is a lot in this for

future libraries: stimulating and inspiring imagination, then providing spaces, technologies, services that allow people to make things (not just write about them) and also assisting in bringing people together to put those great ideas into practice.

Ken said we are constantly evolving and modern technology enabled us to do things now that were not even possible before it was introduced. Sometimes it also allows us to imagine possibilities well beyond what we can now do. He warned that even though there has been so much technological innovation in the last 10 years, IT in education seems to have blockaded against it. (Unfortunately, this was further illustrated by many sessions in the conference that concentrated on controlling ICT from within and defending against all boarders or potenial

collaborators from outside our institutions.) He went on to say that technology isn't over now, it is never over and that the future will involve even more profound changes than we have already seen. He then postulated about the rights of robots in the future. I think he mentioned that now you don't even need to go to the library to access information, so it has to develop another role and embrace the technologies that gives it new purpose.

His next topic was the lack of a sustainable rate for consumption (by humanity). The planet will survive and so too will bacteria, but humanity is now at risk. We need to challenge what we now take for granted. For example a university degree no longer assures you of a job for life. For humans, life is not so linear or manufactured and we must think differently about ourselves to become more organic and creative. Creative education depends on different kinds of questions in which there is no correct answer. I doubt that the current obsession with big data collection and analysis will help us much in this quest. Currently we think in terms of improving old policies rather than looking at new systems.

Don't even take for granted that we know what the question is. To sum up, I was reminded of two further J.K. Galbraith quotes:

Faced with the choice between changing one's mind and proving that there is no need to do so, almost everyone gets busy on the proof.

The conventional view serves to protect us from the painful job of thinking.

Mimi Ito

Media abundance & weapons of mass distraction

Open networks, social & connected learning:

- leverage local relationships
- everyone can be a teacher
- meet learners where they are
- recognise learning in the wild

Connected Learning: at the intersection of peer culture; interests; & the academy

Professor Mimi Ito from UC Irvine is a Cultural Anthropologist. This was a great follow-up to Ken Robinson's keynote.

She talked about adapting educational technology in the 21st century to platforms that can connect classrooms to a wider world of learning. For middle school kids those technologies centre around games like Minecraft and media sources like YouTube.

Education lags behind changes outside the classroom. It needs to move towards open networks that: increase the amount of information that is available; are production oriented; solve problems; include civic engagement; and are inquiry based. We are not there yet.

To tap the potential we need to forge stronger connections between classrooms and the world at large. Education needs to be seamless with life itself. Technology can be a powerful ally for this agenda.

Younger people are more avid readers - in all forms. And they average 7.5 hrs per day in media consumption (it is saturated). Gaming is the entertainment media of our time - at all levels of society.

Abundance (of options, availability, continual connection, etc.), however, can also be too much of a good thing.

An example from her research. She worked with teams of ethnographers from 2005-08 and found:

There is a generation gap in the perceived value of online activity - younger people see it as a life line and older people see it as a waste of time (even though they use it themselves)

What do they do & learn? Heaps! Baseline technical literacy and to be a social being. Uploading photos, managing web pages, managing profiles, interacting, judging, etc. Some online tools really allow people to do amazing things, such as uploading to YouTube channels for civic causes. Some users are really out there, but they are a minority. At the other end of the spectrum there are the bullies. She quoted GIbson: the future is already here, just not evenly distributed.

She then went on to distinguish between Friendship-driven & Interest-driven participation. This started with MySpace and Instant Messaging and is now based around Facebook and Texting (or other fast ephemeral services like Snapchat and Kik). Dorks and geeks can connect with others who have shared interests and share knowledge and expertise - so that is very different to a friendship group. She used the example of Facebook being used to connect with those you went to school with. So FB is more about friendship (with kids seeing adults there as just creepy) and Tumblr (& the like) is more about interests. It is now easy to find and connect to an online community that is very different to the one in which you live: communities of producers with like interests. It allows and facilitates the development of potential for those resourceful enough to take/absorb/use from their peers and interest groups and then apply it in an academic community. She warned though that only a few do this.

Mimi said the academic bubble now has to reach out and facilitate those connections. To overcome the cultural gaps they face young people still need and look for adult support and guidance.

She warned that some tools can also become "weapons of mass distraction". Attention cannot be controlled the ways we used to. We need to more creatively deal with a culture or environment of media abundance. And we don't want to go back to an environment of scarcity.

Quoting Howard Rheingold in NetSmart she says we need strategies to cope with abundance and distractions such as: crap detection; attention management; collaboration; participation; net know-how; etc.

Referring to Open Education Resources (and MOOCs?) she said that the build-it-and-they-will-come attitude tends to re-advantage those already advantaged and only serves to widen the gap. Access is not enough. Some guiding principles:

leverage local relationships - peer cultures; the warm body effect is important; community based learning labs in libraries (e.g. MOOCs with local guides)

everyone can be a teacher - (not just the traditional experts) so peer-to-peer university; everybody can help (e.g. PHONAR); use aggregators; Jim Groom's and DS106 - digital storytelling - it lets the internet do it meet learners where they are - in interests; peer cultures (e.g. the Walking Dead MOOC)

recognise learning in the wild - credentialing such as coders and gamers being recognised in LinkedIn; open badging infrastructure; learning to be more visible and under learner control

She used a three-circle diagram to show that Connected Learning happens at the intersection of three communities: Interests; peer culture; and the academy. She described as "chocolate coating broccoli". Actually, I don't mind broccoli; I am sure she meant to say cauliflower. Finishing up, she reminded us that the major challenge in all of this was in getting faculty/teachers/academics on board, not so much the students.



Jane McGonigal

One billion play games for one hour per day, stimulating 10 positive emotions

Play isn't the opposite of work, it is the opposite of depression

Education should create new knowledge & insights and function as a node in a network of distributed creativity

Through games, MOOCs & live events learning can become more creative, anytime, anywhere & in collaboration

Jane McGonigal, the game designer and author of the best-seller Reality is Broken: Why Games Make Us Better and How They Can Change the World gave a wonderful keynote called Higher Education is a Massively Multiplayer Game.

She sees and advocates the incorporation of gaming as possible future for higher education, saying that over one billion people now play games for at least an hour per day. Some people are so committed that they play games like it is their job. Apparently games bring us 10 positive emotions: joy, relief, love, surprise, pride, curiosity, excitement, awe/wonder, contentment and creativity. Games also provide an environment in which it is safe to fail and easy to learn from one's mistakes.

She said that games also develop a 3:1 (positive to negative emotions) resilience that makes people more productive and successful.

She also showed some neurological research scans of brains from Stanford that showed the difference between active and passive brains. They were most active when engaged in a game. She said that Play was not the opposite of work, it was the opposite of Depression. Apparently, gaming activates the same part of the brain as a cocaine addiction. It encourages: the mastery of a skill, solving puzzles, driving personal ambition, motivation, the anticipation of rewards, practicing habits, determination and further skill development.

cocaine addiction. It encourages: the mastery of a skill, solving puzzles, driving personal ambition, motivation, the anticipation of rewards, practicing habits, determination and further skill development.

She urged educators to super empower learners about their own ability to succeed in learning by using things like points to complete missions, badges for development of new skills - anything that gives learners a meaningful goal and recognises their achievement. What could be done with a billion gamers on connected devices? What could they do together?

She then spoke of Joi Ito's belief that students should now be creating knowledge and insight as part of their education, not just learning what is already there. More from Joi Ito (who is Director of MIT's Media Lab):

I don't think education is about centralized instruction anymore. Rather it is the process of establishing oneself as a node in a broad network of distributed creativity.

And those thoughts beautifully flowed on from the sentiments expressed earlier by both Ken Robinson and Mimi Ito.

Jane then illustrated three projects that bring together the concepts of play and acting as a node in a broad network:

Foldit, from the University of Washington teaches protein folding, building on the fact that manipulation by participants in the virtual space was better than that of super computers because gamers were more skillful and possessed of better spatial intelligence. They knew not to apply brute force. Soon after an invitation to join the project was published in Nature, gamers solved in three weeks a problem with HIV/AIDS that had baffled scientists for over 10 years.

Evoke (based on Grand Theft Auto?) is a project that helps solve social problems with young people becoming super heroes for the rest of the world. It focussed on youth at university age in Sub-Saharan Africa as a source of solutions not just problems. The aim is to solve real-world problems by making the best use of youth skills and with their collaborators and allies. Blogs, photos and videos were uploaded to prove progress. The World Bank Institute (WBI) provided Social Innovator badges and it resulted in 20,000 students being enrolled from 130 countries. They accidentally ran a MOOC! 50 new social enterprises were funded by the WBI like **Libraries Across Africa** (now **Librii**): a franchise model that is up and running in Ghana now.

Find the Future is a game that Jane helped to create for the New York Public Library (NYPL) Centennial in 2011. It kicked off with an overnight event that offered 500 places for players (18 and over) to explore the NYPL's collections for clues locked away in 100 objects that changed history. They had 10,000 applicants. Together the participants put together a collection of stories over night for the NYPL's rare book collection.

Jane believes the future of education is in a blended environment of gaming, something like MOOCs and live events that allow learners new ways of learning through creative practice anytime, anywhere and in collaboration with others.



Artists-in-Residence



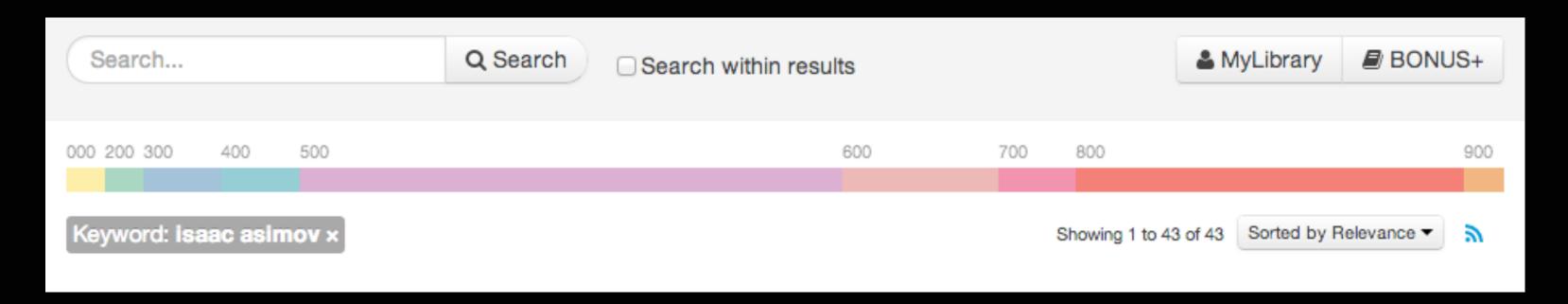
MediaObject

MediaObject is a book series that is focused on publications from researchers and artists exploring and documenting practice based projects not based primarily in text.









We've now had two Artists in Residence over 2012 and 2013. They've both been very beneficial programs with Chris Gaul's exploring the different nature of Discovery (as opposed to Search) in Libraries and Chris Caines looking at the nature of the "book" by exploring the possibilities found today in mashing together transmedia to fully take advantage of new digital capabilities.

For more, see:

http://www.lib.uts.edu.au/blog/university-librarian/2013/04/artist-residence-update

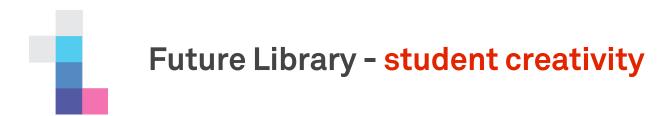




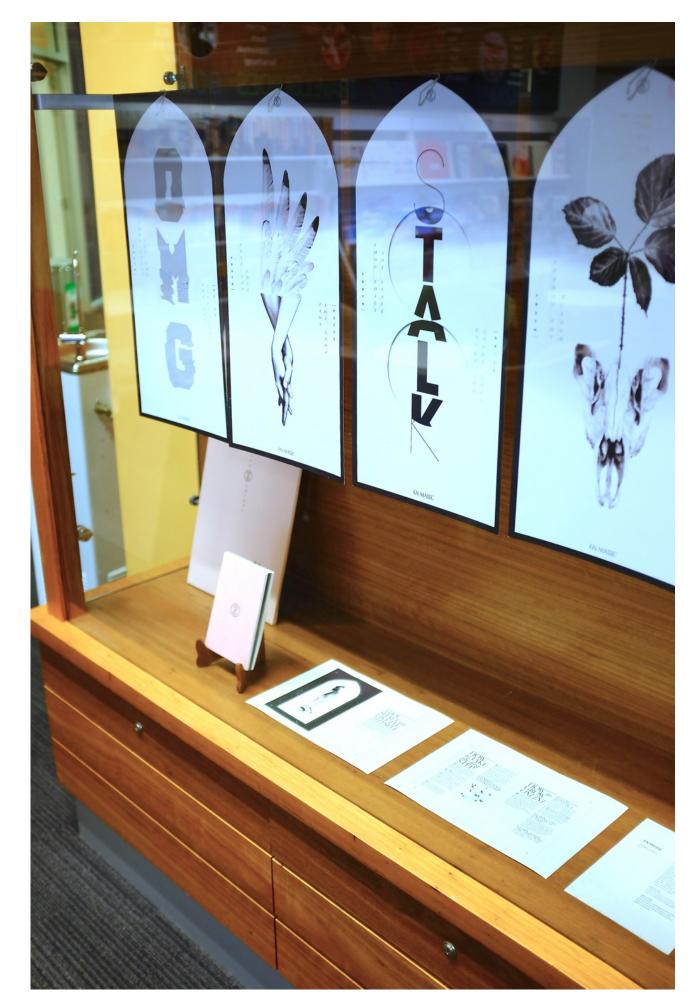
UTS DAB 2nd year Bachelor of Animation students: "Praxis Makes Perfect" at Vivid 2013

An example of the kind of new media work that students are creating and being assed on. Read more here:

http://www.lib.uts.edu.au/blog/university-librarian/2013/06/praxis-makes-perfect

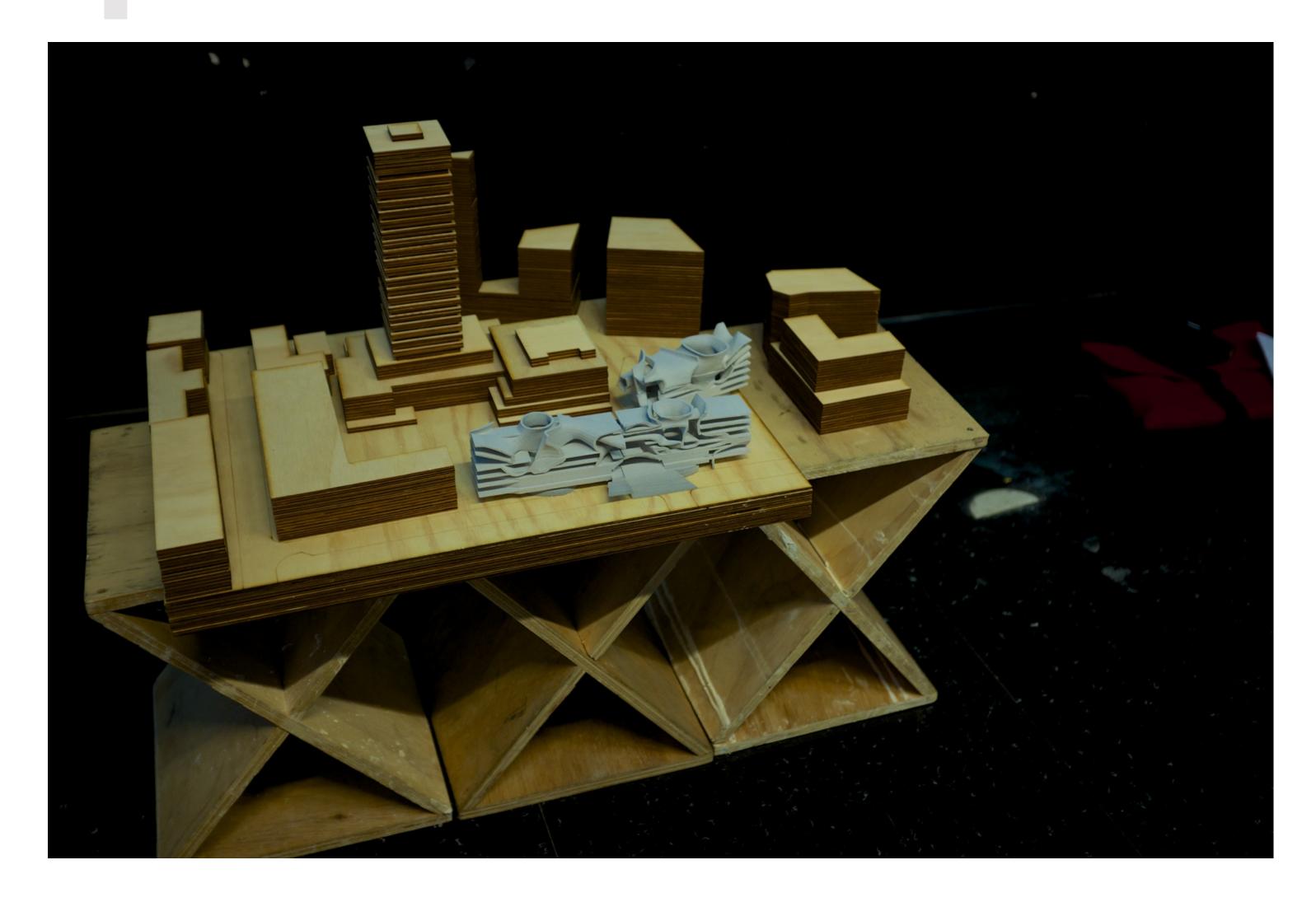






UTS DAB Visual Communications student works on display in the Library

The work on the left is from under-grad students and was displayed in late 2013. On the right is work acquired from a graduate exhibition in 2011. It is now part of our Special Collections and the designer now works for us - Tom Fethers. He has also designed our new visual identity - the small colourful L that appears on all slides and now forms our way finding signage.



UTS DAB Masters of Architecture students Oliver Bennet & Mark Fitzgerald. UTS Forum: Knowledge, Power.

An example of the kind of new media work that students are creating and being assed on.

DAB: animation, exhibitions, textiles

FASS: multimedia, stories, websites

LAW: film, debates, moots

BUSINESS: marketing, events, film

HEALTH: models, simulation, data vis

SCIENCE: data vis, sketches, models

FEIT: games, programs, robots

These are just my examples of the different kinds of work that students are creating in all faculties. I am sure that the implementation of our new Creative Intelligence degrees will have further impact. It is not an exhaustive listing.

The Library spaces and technologies need to reflect and support the creation of these new forms of student work and knowledge. It also needs to encourage the connection, peer-to-peer support and collaboration across the different forms of expertise in all of these areas that exists within our faculties and schools.



FUTURE STUDENTS CURRENT

RESEARCH AND TEACHING

PARTNERS AND COMMUNITY

)

Overview

Initiatives

Working with UTS

Venues and facilities

Conferences and seminars

UTS > Partners and community > Initiatives > UTS Creative Intelligence Strategy > Overview



CREATIVE FRONTIERS INNOVATIVE FUTURES

Overview

Working with Government

Creative partnerships

Leading edge research

The learning nexus

Public engagement

Overview



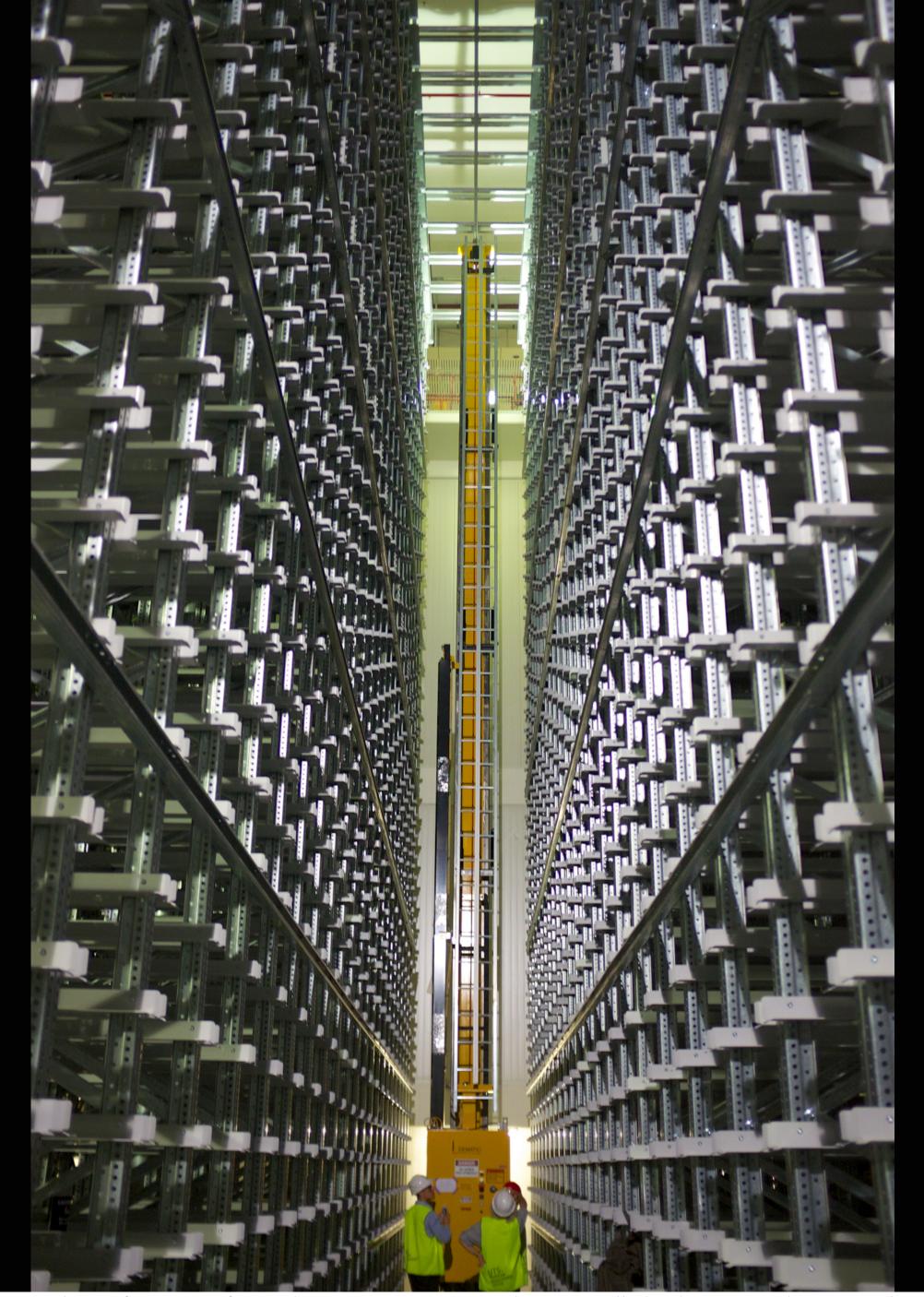
UTS has begun a new set of joint degrees that offer a Bachelor of Creative Intelligence and Innovation (BCII). With its focus on high-level conceptual thinking and problem solving practices that drive creative, innovative and entrepreneurial outcomes, graduates of the BCII will be sought after by employers the world over - giving our students a leading edge.

This course is for high-performing, radical thinkers who know no boundaries. Seemingly unsolvable problems are examined from multiple perspectives, drawing on thinking from fields as diverse as midwifery, journalism, engineering, law and architecture. The BCII promises a unique, dynamic learning and assessment experience, one that will empower students to leverage the knowledge and skills gained in their core degrees. Students will work side-by-side students from a range of discipline areas in an intensive lab-based learning environment.

Their core degree will shape the thinking they take to the BCII labs which, in turn, will inspire, provoke and provide new knowledge that will advance their learning curve.

A combined degree, the BCII can be undertaken alongside 18 core UTS degrees.

Obviously, the UTS Library needs to support these new innovative degrees.





Our Library Retrieval System

The future library will no longer be just about print or text.

This is an in progress short of just one of six aisles in our LRS as it was being installed in late November 2013. The system is capable of storing around 1 million print items and allows for the library itself to be no longer primarily a book storage facility. Printed items can easily and quickly be retrieved from this system for reading and loans, but they are no longer stored in prime real estate within the library itself. This offers us more space for more students and to incorporate new technology platforms that everyone is now using to share knowledge and to practice their learning.

TECHNOLOGIES | data visualisation | animation | video & sound | creative | maker spaces | gaming |

It is very interesting to consider the kinds of technologies that must now be included or at least seriously considered for 21st century academic libraries.

I think the bench mark has now been set way out in front of just about everyone else at the Hunt Library, NCSU:

http://lj.libraryjournal.com/2013/09/buildings/lbd/tomorrow-visualized-library-by-design/

It is clear that the Hunt Library cleverly uses the technologies listed above.

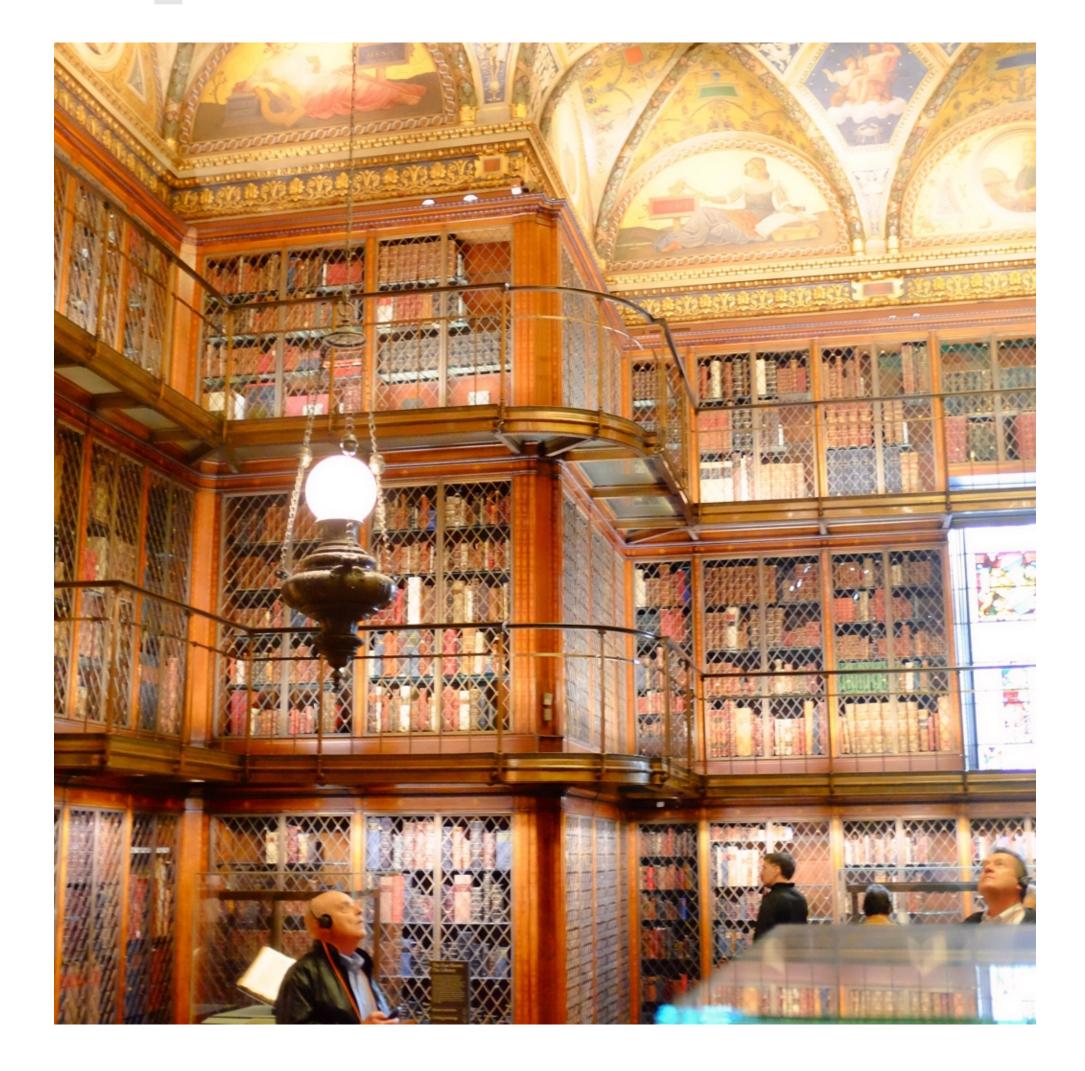
DATA VISUALISATION is now being used in our arts, social sciences, design, science, IT and health schools. I believe some access to that should be provided in libraries to provide access to anyone on campus who wants to experiment, observe the efforts of others or learn how to use it.

ANIMATION similarly is now being used and taught in many faculties. We could showcase it centrally in the Library and help to connect those practicing this art in the many different areas.

VIDEO & SOUND production may soon become the preferred medium for knowledge dissemination in the future. Even if not, they will certainly be a major platform for future scholars and the early steps are already being taken (some at UTS). First year students come to us already using YouTube as their search engine of preference. They consume all kinds of knowledge and entertainment through it and many are skilled at producing content for it. I believe that libraries should now be providing spaces for anyone on campus who is producing, mixing, editing or showcasing their video or audio content.

CREATIVE MAKER SPACES - Hunt Library provides such spaces and includes technologies such as 3D printers and advanced laser cutting equipment so that students and staff can use them centrally. I am heading to Hunt in early October 2013 for two conferences and workshops on technologies and spatial design. I bet that I will learn much there and have more to add on my return. Technologies like these in our future library become even more important when you consider our move into the Creative Intelligence area from 2013 onward.





Morgan Library, NYC

FROM:

book storage many rules silence access print passive conservative reactive

We want to move from this old model for libraries where the collections were precious and access was limited.





people few rules inspiration creation multimedia active engaged collaboration new services

James B. Hunt Library, NCSU

We see libraries becoming more for and about the people who use them. Offering new services and meeting new demands.

Above is one of my slides from a visit to Hunt Library, NCSU in October 2013. You can see more images on my Flickr set here: http://www.flickr.com/photos/malbooth/sets/72157636305354703/

One thing seems clear to me: the library must be designed to cope with the rapid pace of technological change that we cannot even guess at for more than 3-5 years. Our spaces must be adaptable for future purposes and they should be "wired" for change too. Although it is unlikely that the building itself can expand, some internal scalability would be beneficial and what that means is the ability to scale up some areas, whilst scaling back on others.



Future Library - quiet reading room



James B. Hunt Library, NCSU

I loved this reading room at Hunt Library. It is scholarly, yet open and welcoming. The fit out provides inspiration and encourages what is to be done in that space: studying. It seats 125 and Aaron Moser of Thomas Moser designed these "Hunt Chairs" for this space. Small group study rooms look down on this room from above.





James B. Hunt Library, NCSU

This is a different type of reading room where BYOD is most obvious. It is at a higher level and the different design lets students select based on their preferences. My guess is that this room, on the highest level of the Library (L₅), would seat 60-80 students.





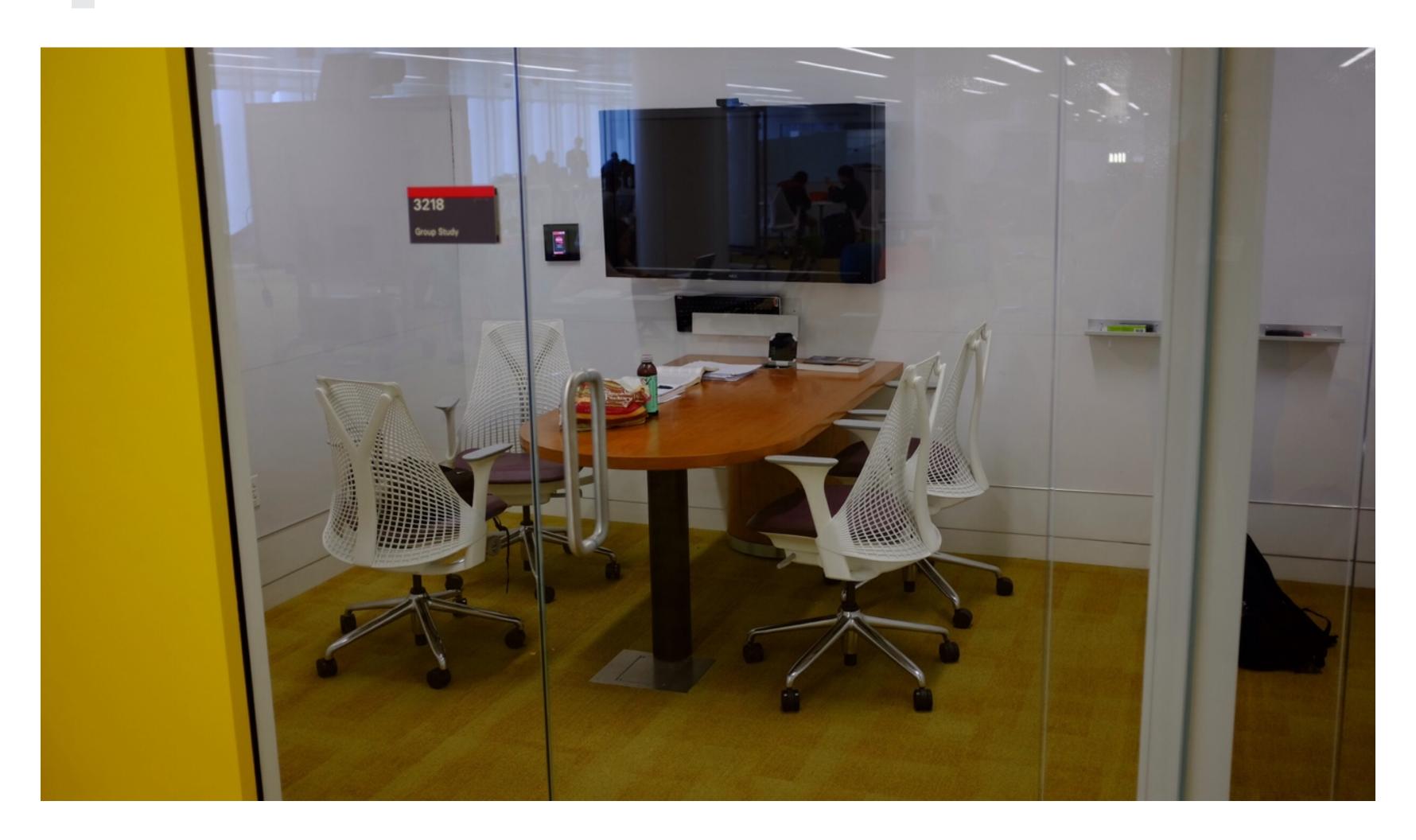
James B. Hunt Library, NCSU

Hunt Library has many reading lounges and all are popular. This one really gives a feeling of space and is an impirtant part of the entrance to the Library itself.



James B. Hunt Library, NCSU

This is an open group study space with a large white board wall. It was very popular with students.



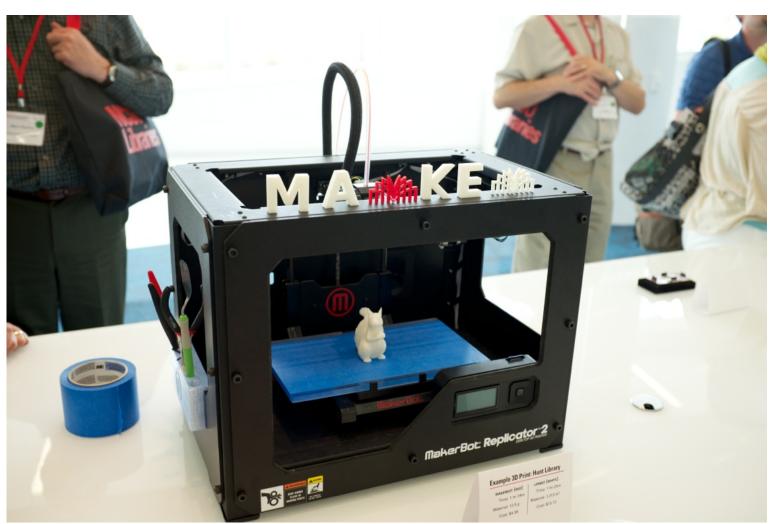
James B. Hunt Library, NCSU

Hunt has almost 100 of these small group study spaces. They varied in size and fit-out.









James B. Hunt Library, NCSU

Here we see a virtual data lab that can be used for virtual modelling (above) and on the lower level their Gaming lab (left) and an example of the maker-bots they use in their maker-space to allow for 3D modelling.



James B. Hunt Library, NCSU

Hunt Library has several smaller rooms allowing for multi-media production, mixing and editing. They also have video conferencing facilities.



James B. Hunt Library, NCSU

This is actually their creativity lab, and it has many different projectors and speakers in the roof allowing for images and films to be projected in many different ways. The room can be divided and used in many different configurations.



James B. Hunt Library, NCSU

Hunt Library has only this service point in a library that provides seats for 1750 students. (They have another library at D.H. Hill.)



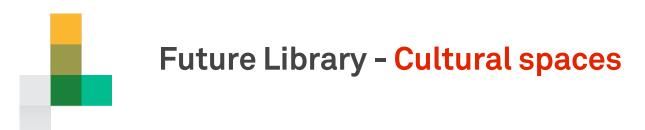
James B. Hunt Library, NCSU

This is a graduate student area with spaces exclusively for higher degree research students and controlled access.



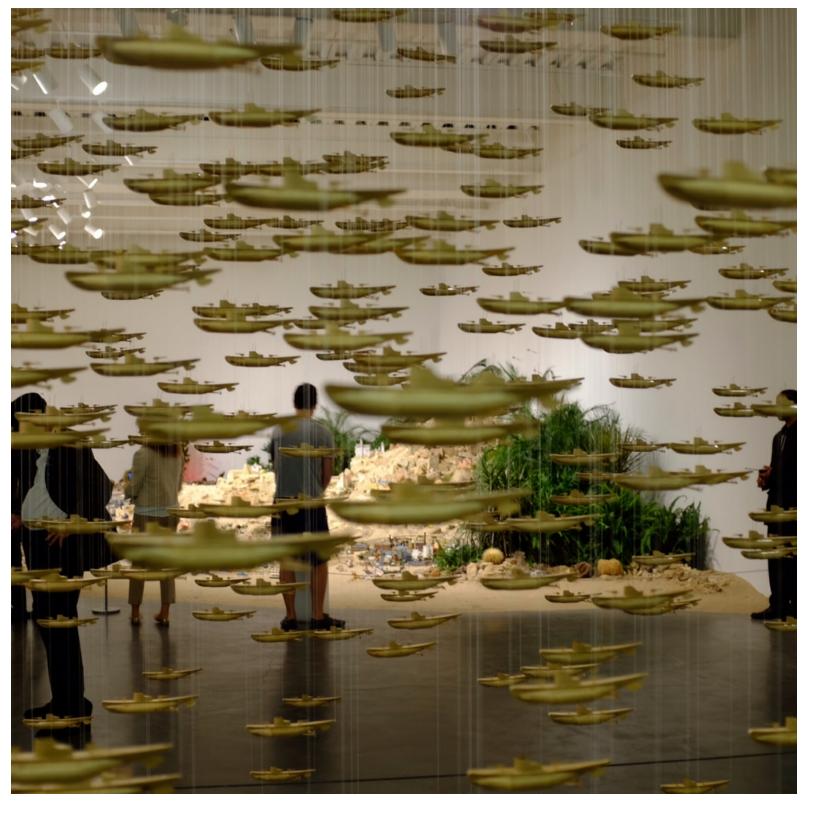
James B. Hunt Library, NCSU

The Hunt Library has less then 30,000 books on open shelves. These are lower and more open than traditional library shelving and only seen in three areas: the Rain Garden Lounge (above), the deck above this lounge (top centre of this image) and in the Quiet Reading Room.





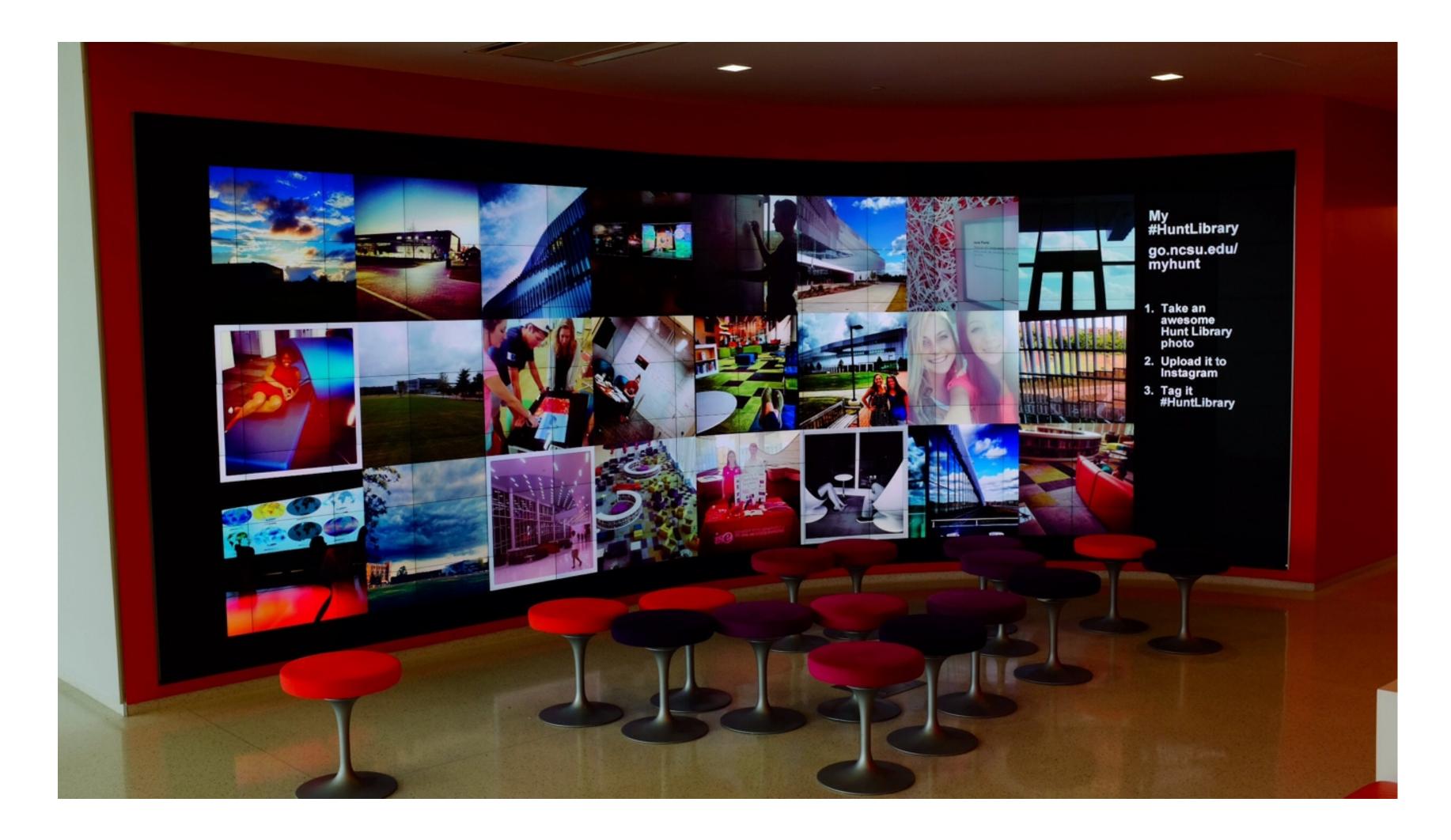
James B. Hunt Library, NCSU



New Museum, NYC

Hunt Library have not really pushed culture as much as we'd like to at UTS, though they have commissioned the large art work on the left "The Nature of Language" by José Parlá. The work on the right is from an exhibition of the work of Chris Burden at the New Museum of NYC.





James B. Hunt Library, NCSU

This isn't really an animation theatre or wall but it is a good example of what an open theatre/wall would look like.

It is actually the multi-screen iPearl immersion thatre at Hunt Library and here it is showing Instagram images harvested from everyone who has posted snaps of Hunt on Instagram.





James B. Hunt Library, NCSU

I liked these small enclosed, but still open individual study spaces. They could also be used for one-on-one consultations with staff.



Future Library - light, colour, furnishings, inspiration





James B. Hunt Library, NCSU

Hunt Library really does design very very well with great use of appropriate quality furniture as well as colour, light and flooring to define the use of spaces.

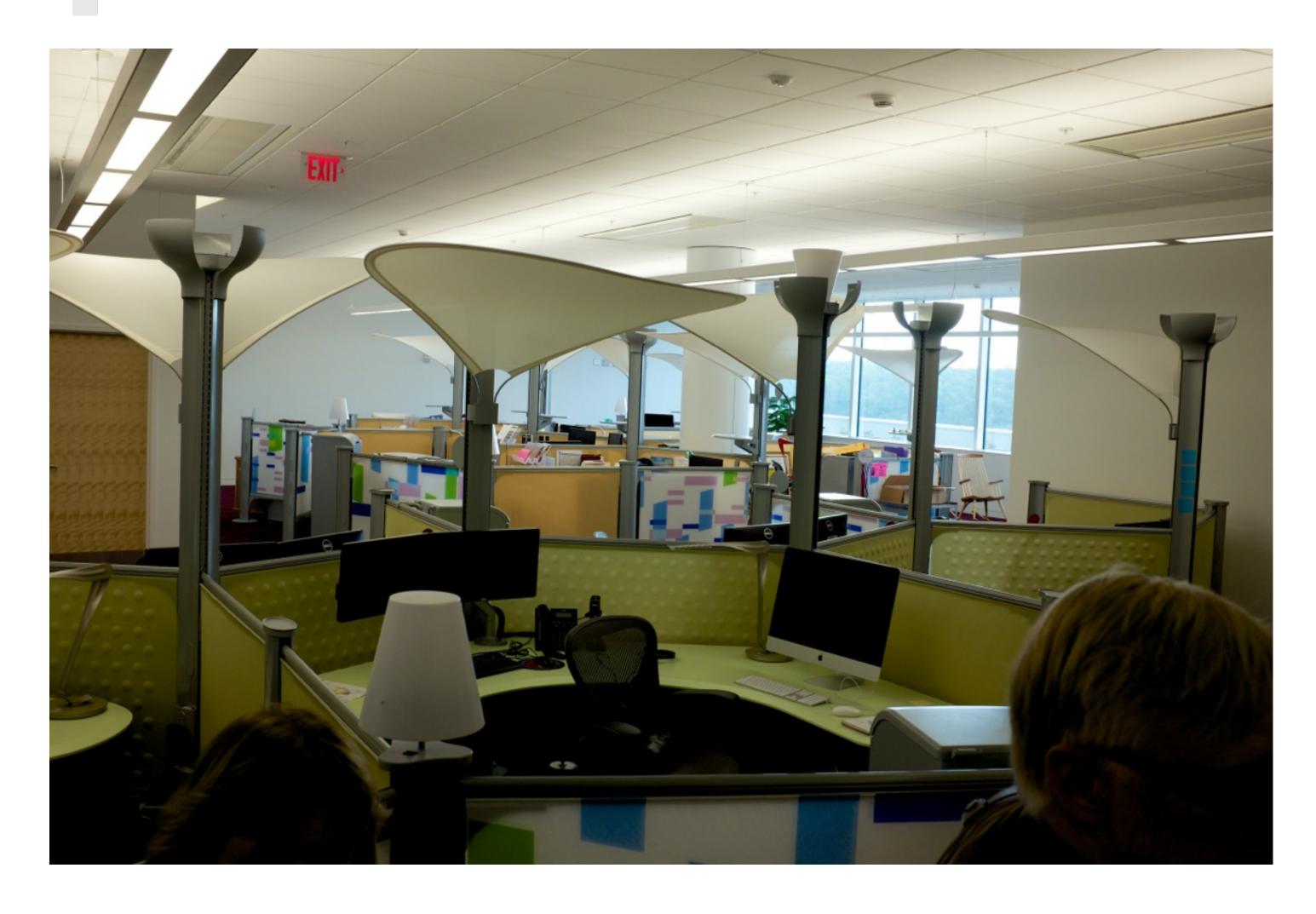
Shown here is the top deck Skyline Terrace with its beautiful open views and the balcony corridor above the Rain Garden Lounge. These are amazing spaces and well used by students/





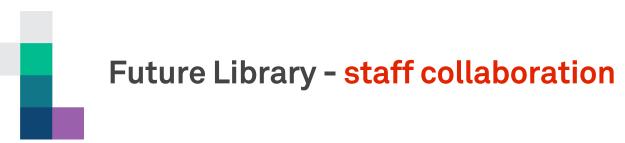
James B. Hunt Library, NCSU

Everyone always talks about cafes within libraries. Hunt do that well too. It isn't grand accounting for every need, but provides the kinds of food and drink they think are appropriate for the space. This gives the Library some control over what is being brought in. There are also a couple of vending points within the Library.



James B. Hunt Library, NCSU

Open staff desks at Hunt





James B. Hunt Library, NCSU

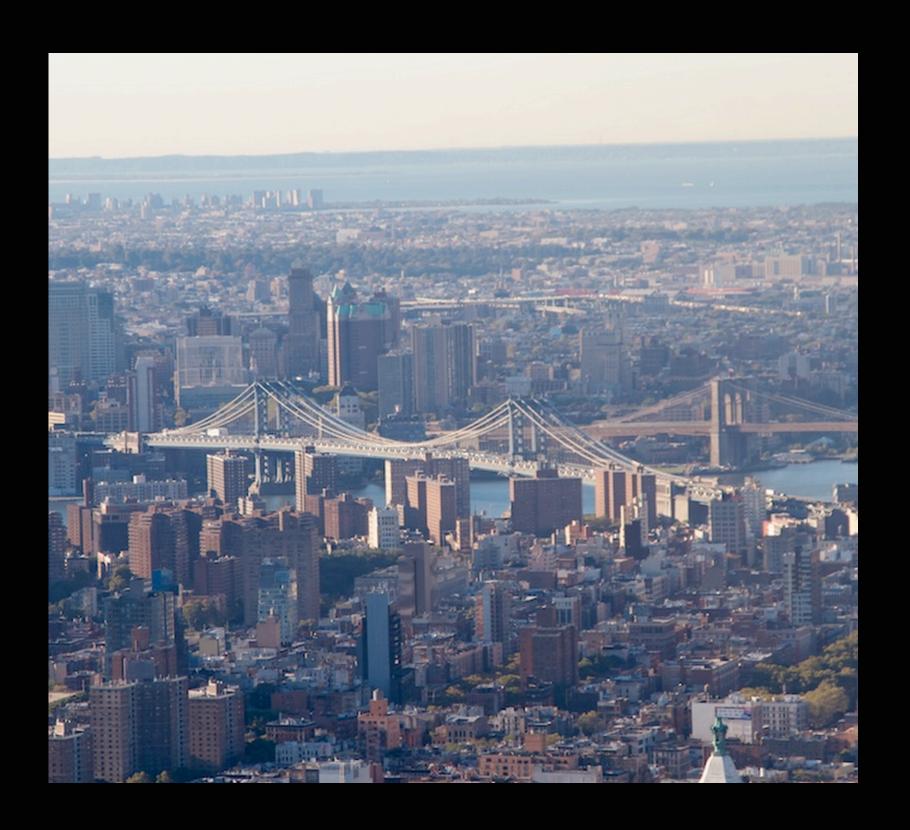
I really liked the feel and facilities in this staff collaborative space at Hunt Library. There were many different possibilities for staff to get together for meetings, project work, meals, relaxation, etc. I think it is essential in an open desk environment in which requirements like this are all too often forgotten.



HOW MUCH CAN WE DESIGN IN-HOUSE? | architecture interiors | furniture |

Our future library will be the last major facility of a one billion dollar campus redevelopment project. I'd like to think that we could use it as a showcase for UTS design talent because I know we have in-house capabilities to design at least some of the architecture, interior spaces and furniture that the library will need.





services | data | engaged | research | impact | connecting | personalised | UX->UI | creative | online edu | curated | mobile | blended | 24/5 |

Bridges connecting Manhattan to Brooklyn and Queens - there are many and a tunnel (at least one that I know of). Libraries are really bridges to knowledge, culture and other people, much more so than "destinations". The words above reflect what we see as our key services in the future. They are based on what we know to be continuing requirements for university libraries and many are emerging as we progress our deliberations. We are working with service designers to help us design these services properly, just as they are doing now with several banks, Qantas, and some telcos.

Data is a growing requirement for UTS in terms of Research, Learning Analytics and Business Intelligence. Our new systems need to be able to support new requirements and we need to provide new services about data management and curation.

Libraries must be engaged with all elements of the university and we've found that the more engaged we are, the more benefits there are coming back to assist us. It is a major priority for us to stay up to date with what is being taught and researched and to keep our services relevant.

Research impact is a growing requirement for libraries in assisting our researchers to demonstrate their worth. We are trying to do a lot more in this area already.

We are also trying to connect people across the campus with each other and with knowledge resources and culture when relevant. It requires a more active and willing mindset, but is very rewarding in the long run. I think we will need to constantly perform user experience (UX) research and design on both our online and physical services in the future. I'd do it right now if I could convert resources quickly. The results of that research into our users' behaviour should be translated into constantly improved services and user interfaces (UI).

I've presented elsewhere about how we have tried to be more creative at all levels in developing our services to date. That must continue. See also http://www.slideshare.net/malbooth/creativity-academic-libraries
Developments in online education has been a major focus of conversation in 2012. The library will need to support new strategic directions once these are decided in UTS in 2013. I think the most likely outcome is some form of extended blended learning program, but in most cases we are already "flipped" and providing a lot of our resources and most support services online. See also http://informationonline2013.wordpress.com/2012/11/14/the-implications-for-libraries-of-recent-global-trends-in-open-online-education-part-2/



COLLECTIONS

development management access facilities sustainability

SERVICES

data advisory
research help
literacy
online learning
comms
UX

DIGITAL
INNOVATION
e-publishing | library
technologies |
data curation |
discovery |
UI |

This is a draft of what the centralised and modern future UTS library organisation might look like. We see these three basic streams or elements as most likely and we've listed the main functions of each underneath them. No doubt, over the next few years, new needs and demands will emerge and the library structure needs to be flexible and responsive enough to meet them, so none of this is locked down in concrete.

THANK YOU



